DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with J. Curtis Edmondson on 10/22/09.

The application has been amended as follows:

The claims have been amended as follows:

Claims 12-34, 37-38 have been cancelled.

Referring to claim 1, line 4,

-- sequential steps -- has been inserted, replacing "steps".

Referring to claim 1, line 7,

-- the check -- has been inserted, replacing "then check".

Referring to claim 2, line 5,

-- pump. -- has been inserted, replacing "pump,".

Referring to claim 11, line 3,

-- an inline check valve -- has been inserted, replacing "a check valve".

Referring to claim 11, line 4,

-- sequential steps -- has been inserted, replacing "steps".

Referring to claim 11, line 7,

-- the flow transducer -- has been inserted, replacing “a flow transducer”.

Referring to claim 11, line 8,

-- unit, -- has been inserted, replacing “unit,,”.

Referring to claim 35, line 3,

-- said flap valve -- has been inserted, replacing “said check valve”.

Referring to claim 35, line 4,

-- sequential steps -- has been inserted, replacing “steps”.

Claim Objections

2. Objections withdrawn.

Claim Rejections - 35 USC § 112

3. Rejections withdrawn.

Claim Rejections - 35 USC § 102

4. Rejections withdrawn.

Claim Rejections - 35 USC § 103

5. Rejections withdrawn.

Allowable Subject Matter

6. Claims 1-11, 35, 36 are allowed.

The following is an examiner’s statement of reasons for allowance:

Walker teaches a method for monitoring and optimizing fluid extraction from geological strata comprising: coupling a flow transducer to a check valve operatively coupled to a discharge conduit associated with a walking beam type pumping unit (Col. 22, line 56 – Col. 23, line 14; Fig. 1A), wherein said flow transducer is adapted to

generate flow signals by detecting movement of a sensing element associated with said check valve (Fig. 2, element 48; Figs. 3-6; Col. 26, lines 24-34; Col. 56, lines 63 – Col. 57, line 21; Col. 23, lines 15- Col. 25, line 65, sensing element 158), electromagnetically coupling said flow transducer to a local processing system (Fig. 12, fluid sensor microprocessor), monitoring said flow signals and sensing element at least during operation of said pump (Col. 55, lines 39-42), A/D conversion of said flow signals and sensing element to create flow signal data (Fig. 12, A/D converter); accumulating at least a portion of said flow signal data in a memory associated with said local processing system (Col. 55, lines 6-24; Col. 56, lines 33-62), and determining an optimum pumping cycle from said accumulated flow signal data (Col. 23, lines 44-50; Col. 55, lines 34-55, Col. 56, lines 49-62), wherein said optimum pumping cycle eliminates fluid pound (Col. 1, lines 13-30, optimum production; Col. 13, lines 1-23, optimum production is to be maintained by a mechanical pump without the adverse effects of fluid pounding or cavitation, then it is essential that a proper "rest time" be selected for programming into the motor control device that is used to regulate the duty cycle of downhole equipment…For this reason, it is imperative that the total daily "rest time" of any pump be limited in duration and uniformly distributed throughout each 24 hour operating period; Col. 17, lines 1-12, control of rest period; Col. 33, lines 47 – Col. 35, line 2); wherein Walker further teaches attaching a magnet to a flap element included in the check valve (Fig. 5, Col. 25, lines 23-37).

And, Schultz teaches another processing system is in processing communications over a network with at least a local processing system and includes

means for; receiving accumulated flow signals from said network; retrievably storing at least a portion of said accumulated flow signals in a data store; determining an optimum pumping cycle from said accumulated flow signals; generating control command; sending said control command to at least said local processing system; and outputting said optimum pumping cycle in a format useful for optimizing fluid extraction from said geological strata using the pump; wherein said another processing system further includes means for heuristically determining said optimum pumping cycle; wherein said transferring is accomplished using an electronic transport medium, wherein said electronic transport medium comprises one of, a telecommunications link, a laptop computer, a personal data assistant, or a data logging device (Page 3, paragraph 44; Page 4, paragraph 52; Page 4, paragraph 49; Pages 5-6, claim 14).

And, U.S. Pat. No. 3,857,277 to Moore (supplied by applicant) teaches modification of a check valve (Col. 2, lines 12-20, magnet molded in lower edge; and/or Col. 2, lines 21-49, cleaning), said check valve including a flap element (Col. 1, lines 55-67, flap), such that the modification further comprises the steps of attaching a magnet to the flap element (Col. 2, lines 12-20, magnet molded in lower edge of flap); locating the flap element (Col. 2, lines 21-49), removing the check valve (Col. 2, lines 21-49, removal of flap), and reinserting the check value (Col. 2, lines 21-49), such that the magnetic field is detectable by a flow transducer (Col. 2, lines 1-20).

None of Walker, Schultz or Moore, taken either alone or in obvious combination disclose a method for monitoring and optimizing fluid extraction from geological strata having all the claimed features of applicant's instant invention, specifically including:

modification of a check valve/inline valve/flap valve, said valve including a flap element, such that the modification further comprises the sequential steps of removing the check valve, locating the flap element, attaching a magnet to the flap element, and reinserting the check value, such that the magnetic field is detectable by a flow transducer.

Claims 2-10, 36 depend from claims 1, 11, or 35 and are therefore also allowable. It is for these reasons that applicant's invention defines over the prior art of record. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean P. Shechtman whose telephone number is (571)272-3754. The examiner can normally be reached on 9:30am-6:00pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SPS
Sean P. Shechtman
October 19, 2009

/Sean P. Shechtman/
Primary Examiner, Art Unit 2121